

IN THE CLAIMS

Please amend the claims as follows:

1. (Cancelled).
2. **(Currently Amended)** A method of presenting an antigenic peptide on the surface of a viable cancer cell, said method comprising:
 - contacting said cancer cell with said antigenic peptide and with a photosensitizing agent, wherein said peptide and said agent are each taken up into an intracellular membrane-restricted compartment of said cell;
 - irradiating said cell with light of a wavelength effective to activate the photosensitizing agent, such that the membrane of said intracellular compartment is disrupted, releasing said peptide into the cytosol of the cell, without killing the cell;
 - wherein, said released antigenic peptide, or a part thereof of sufficient size to generate a cytotoxic T cell response, is subsequently presented on the surface of said cell ~~by a class I MHC molecule;~~
 - wherein presentation of the antigenic peptide, or part thereof, on the surface of said cell results in cytotoxic T cell mediated cell killing; and
 - wherein the photosensitizing agent is selected from the group consisting of a porphyrin, phthalocyanine and a chlorin.
3. (Cancelled).
4. (Previously Presented) The method of claim 2, wherein the antigenic peptide is a vaccine antigen or vaccine component.
- 5-7. (Cancelled).
8. (Previously Presented) The method of claim 2 wherein the photosensitizing agent is meso-tetraphenylporphine with 4 sulfonate groups (TPPS₄), meso-tetraphenylporphine with 2

sulfonate groups on adjacent phenyl rings (TPPS_{2a}), or aluminum phthalocyanine with 2 sulfonate groups on adjacent phenyl rings (AlPcS_{2a}).

9. (Previously Presented) The method of claim 2, wherein the antigenic peptide and/or photosensitizing agent is bound to one or more targeting agents or carrier molecules.

10. (Previously Presented) The method of claim 2, wherein said method is carried out *in vitro* or *in vivo*.

11-23. (Cancelled).

24. (Previously Presented) A method of presenting an antigenic peptide or a part thereof on the surface of a viable antigen presenting cell, said method comprising:

contacting said cell with the antigenic peptide and with a photosensitizing agent, wherein said peptide and said agent are each taken up into an intracellular membrane-restricted compartment of said cell;

irradiating said cell with light of a wavelength effective to activate the photosensitizing agent, such that the membrane of said intracellular compartment is disrupted, releasing said peptide into the cytosol of the cell, without killing the cell;

wherein, said released peptide, or a part thereof of sufficient size to generate an immune response, is subsequently presented on the surface of said cell by a class I or II MHC molecule;

wherein presentation of the peptide, or part thereof, on the surface of said cell results in stimulation of an immune response; and

wherein the photosensitizing agent is selected from the group consisting of a meso-tetraphenylporphine with 4 sulfonate groups (TPPS₄), meso-tetraphenylporphine with 2 sulfonate groups on adjacent phenyl rings (TPPS_{2a}), or aluminum phthalocyanine with 2 sulfonate groups on adjacent phenyl rings (AlPcS_{2a}).

-
25. (Previously Presented) The method of claim 24, wherein the antigen presenting cell is selected from the group consisting of a lymphocyte, dendritic cell, macrophage and cancer cell.
26. (Previously Presented) The method of claim 24, wherein the antigenic peptide and/or photosensitizing agent is bound to one or more targeting agents or carrier molecules.
27. (Previously Presented) The method of claim 24, wherein said method is carried out *in vitro* or *in vivo*.
28. (Previously Presented) The method of claim 2, wherein at least 90% of the cells are not killed.
29. (Previously Presented) The method of claim 2, wherein at least 95% of the cells are not killed.
30. (Previously Presented) The method of claim 2, wherein the photosensitizing agent is a sulfonated tetraphenylporphine, a disulfonated aluminum phthalocyanine or a tetrasulfonated aluminum phthalocyanine.
31. (Previously Presented) The method of claim 2, wherein said contacting and said irradiating steps are carried out *ex vivo*.
32. (Previously Presented) The method of claim 31, further comprising administering the cells to a mammal after said irradiating step.
33. (Previously Presented) The method of claim 24, wherein said contacting and said irradiating steps are carried out *ex vivo*.
34. (Previously Presented) The method of claim 33, further comprising administering the cells to a mammal after said irradiating step.

-
35. (Previously Presented) The method of claim 24, wherein the peptide is 15 to 75 amino acids in length.
36. (Previously Presented) The method of claim 2, wherein the peptide is 15 to 75 amino acids in length.
37. (Previously Presented) A method of presenting an antigenic peptide, or part thereof, on the surface of a viable cell, said method comprising:
- administering to a patient said antigenic peptide and a photosensitizing agent, wherein said peptide and said agent are each taken up into an intracellular membrane-restricted compartment of said cell;
 - irradiating said cell with light of a wavelength effective to activate the photosensitizing agent, such that the membrane of said intracellular compartment is disrupted, releasing said peptide into the cytosol of the cell, without killing the cell;
 - wherein, said released antigenic peptide, or a part thereof, is subsequently presented on the surface of said cell;
 - wherein presentation of the peptide, or part thereof, on the surface of said cell can stimulate an immune response in the patient; and
 - wherein the photosensitizing agent is selected from the group consisting of a porphyrin, phthalocyanine and a chlorin.
38. (Previously Presented) A method of presenting an antigenic peptide or a part thereof on the surface of a viable antigen presenting cell, said method comprising:
- contacting said antigen presenting cell with the antigenic peptide and with a photosensitizing agent, wherein said peptide and said agent are each taken up into an intracellular membrane-restricted compartment of said cell;
 - irradiating said cell with light of a wavelength effective to activate the photosensitizing agent, such that the membrane of said intracellular compartment is disrupted, releasing said peptide into the cytosol of the cell, without killing the cell;

wherein, said released peptide, or a part thereof, is subsequently presented on the surface of said cell;

wherein presentation of the peptide, or part thereof, on the surface of said cell can stimulate an immune response in the patient; and

wherein the photosensitizing agent is selected from the group consisting of a meso-tetraphenylporphine with 4 sulfonate groups (TPPS₄), meso-tetraphenylporphine with 2 sulfonate groups on adjacent phenyl rings (TPPS_{2a}), or aluminum phthalocyanine with 2 sulfonate groups on adjacent phenyl rings (AlPcS_{2a}).

39. (New) The method of claim 2, wherein the cytotoxic T cell is specific to said antigenic peptide or a part thereof.

40. (New) The method of any one of claims 24, 37 or 38 wherein said immune response is cytotoxic T cell mediated cell killing and said cytotoxic T cell is specific to said antigenic peptide or a part thereof.